

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

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a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit writes data to said ferroelectric gate field-effect transistors in order of a row,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

4 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

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a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit changes a ferroelectric gate of said ferroelectric gate field-effect transistor to a first polarization state and then writes data in accordance with input of data, changing said first polarization state to a second polarization state,

or said first polarization state, in accordance with said input of data,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

5 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit performs row selection with a gate electrode of said ferroelectric gate field-effect transistor and writes data with a source electrode and drain electrode of said ferroelectric gate field-effect transistor and a substrate electrode or back-surface electrode of said ferroelectric gate field-effect transistor,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

6 (Twice Amended). A two-dimensional active-matrix type light modulation device comprising:

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a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light modulating layers, each light modulating layer being interposed between said pixel electrode and said counter electrode for modulating light incident thereon in accordance with an applied voltage between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes wherein said drive circuit performs modulation by binary static drive,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

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8 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode;

and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to

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said pixel electrodes, wherein said drive circuit writes data to said ferroelectric gate field-effect transistors in order of a row,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

10 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

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a plurality of counter electrodes;

a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit changes a ferroelectric gate of said ferroelectric gate field effect transistor to a first polarization state and then writes data in accordance with input of data, changing said first polarization state to a second polarization state, or said first polarization state, in accordance with said input of data,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

11 (Twice Amended). A two-dimensional active-matrix type light-emitting device comprising:

a plurality of pixel electrodes arranged in the form of a two-dimensional matrix consisting of rows and columns;

a plurality of counter electrodes;

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a plurality of light-emitting layers, each light-emitting layer being interposed between said pixel electrode and said counter electrode for emitting light in accordance with current flowing through the light-emitting layer between said pixel electrode and said counter electrode; and

a drive circuit constituted by ferroelectric gate field-effect transistors respectively connected to said pixel electrodes, wherein said drive circuit performs row selection with a gate electrode of said ferroelectric gate field-effect transistor and writes data with a source electrode and drain electrode of said ferroelectric gate field-effect transistor and a substrate electrode or back-surface electrode of said ferroelectric gate field-effect transistor,

wherein the ferroelectric gate field-effect transistor comprises a single ferroelectric gate field-effect transistor per pixel.

Please add the following new claims:

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28 (New). The device of claim 2, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

29 (New) The device of claim 4, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

30 (New) The device of claim 5, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

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31 (New). The device of claim 6, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

32 (New). The device of claim 8, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

33 (New). The device of claim 10, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further

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comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.

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34 (New) The device of claim 11, wherein the single ferroelectric gate field effect transistor per pixel has its gate directly connected to a first data line, and said device further comprising a second ferroelectric gate field-effect transistor per pixel, said second ferroelectric gate field-effect transistor having its gate directly connected to a second data line.
